

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/086,940	03/01/2002	Sean T. O'Mara	920070.417	6662	
30465	7590 12/28/2005		EXAM	INER	
SEED INTELLECTUAL PROPERTY LAW GROUP LLC			LEWIS, A	LEWIS, AARON J	
SUITE 6300 701 FIFTH AVENUE SEATTLE, WA 98104-7092			ART UNIT	PAPER NUMBER	
			3743		

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/086,940	O'MARA, SEAN T.				
Office Action Summary	Examiner	Art Unit				
	AARON J. LEWIS	3743				
The MAILING DATE of this communication app						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 10/05/2005 (AMENDMENT).						
	<u>_</u>					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-42,44-71 and 73-79 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>66-71</u> is/are allowed.						
6)⊠ Claim(s) <u>1-42,44-65 and 73-78</u> is/are rejected.						
7) Claim(s) 79 is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:						

Art Unit: 3743

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3,5-7,12,14-21,23,27-37,39-42,44-46,51,53,54,59,61-65,73-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flam ('386) in view of Slanetz, Jr. ('091).

As to claim 1, Flam ('386) discloses an apparatus comprising: an intubation tube placement device (10); and an anti-perforation device (21,22) coupled to said intubation tube placement device.

The difference between Flam and claim 1 is the anti-perforation device having an exploratory portion shaped to prevent the anti-perforation device from perforating an internal body structure during insertion.

Slanetz, Jr. teaches an anti-perforation device (12) having an exploratory portion (25) shaped to prevent the anti-perforation device from perforating an internal body structure for the purpose of preventing the rupture (i.e. perforation) of a duct by signaling a control unit of an area of greatest pressure being exerted on the exploratory portion (col.2, lines 43-47 and lines 62-65).

It would have been obvious to modify the anti-perforation device of Flam to include an exploratory portion shaped to prevent perforation of an internal body structure during

Page 3

Art Unit: 3743

insertion because it would have provided a means for preventing the rupture of a duct by signaling a control unit of an area of greatest pressure being exerted on the exploratory portion as taught by Slanetz, Jr..

As to claim 2, Flam discloses a semi-rigid structure (12 and col.6, lines 24-25) having a cross section smaller than a cross section of an intubation tube (24).

As to claim 3, Flam discloses said semi-rigid structure (12) to have a cross section of a cylindrical shaped rod.

As to claim 5, the anti-perforation device of Flam being a fiberoptic device includes a light source (col.7, line 49).

As to claim 6, Flam discloses an external light source (col.7, line 49). A source of power (ac wall outlet or battery) is a necessary part of any light source for a fiberoptic device.

As to claim 7, Flam (col.7, lines 50-59) discloses said intubation tube placement device forms a hollow tube (i.e. note insufflation and suction lumen that extends entire length of device); said anti-perforation device having a trailing portion (e.g. adjacent handle #13); and a channel (col.7, lines 50-59) between the trailing portion and the exploratory portion of said anti-perforation device; and the trailing portion coupled to said intubation tube placement device such that the channel aligns with the hollow tube.

As to claim 12, Flam discloses the anti-perforation device (12) to have a trailing portion (e.g. adjacent handle #13) and an exploratory portion (e.g. adjacent tip of device #21), the exploratory portion being formed from a malleable material (col.6, line 24).

Art Unit: 3743

As to claim 14, Flam as modified by Slanetz, Jr. as discussed above with respect to claim 1 also disclose said anti-perforation device being proximate to the exploratory portion shaped to prevent perforation is also readable as a tactile-accentuator flap (#25 and col.2, lines 43-47 and lines 62-65 of Slanetz, Jr.).

As to claims 15-17, Flam (figs.2,3,5,7) discloses an intubation tube (24) secured to the intubation tube placement device (12), the intubation tube placement device being internal to the intubation tube and a retaining device comprising a rubber stopper (23) having a hole through which the intubation tube placement device (12) extends, the retaining device being in contact with said intubation tube.

As to claim 18, Flam as discussed above with respect to claims 15-17, discloses an intubation placement device guide (24A) having a hole through which the intubation placement device (12) extends, the intubation placement device guide also being illustrated in figs. 3 and 8 as being integral with said intubation tube (24).

As to claim 19, Flam as modified by Slanetz, Jr. as discussed above with respect to claim 14, teaches an intubation tube placement device (#21,22 of Flam) having at least one tactile accentuator flap (#25 of Slanetz, Jr.) coupled to said intubation tube placement device. The tactile accentuator flap (25) is Slanetz, Jr. is also readable upon an exploratory portion shaped to prevent the anti-perforation device from perforating an internal body structure during insertion (#25 and col.2, lines 43-47 and lines 62-65 of Slanetz, Jr.).

As to claim 20, Flam discloses a semi-rigid structure (col.6, line 24) having a cross section smaller than the cross section of an intubation tube (24).

Art Unit: 3743

As to claim 21, Flam discloses the semi-rigid structure to comprise a cylindrically shaped rod (12).

As to claim 23, the outer surface of the tactile accentuator flap (25) of Slanetz, Jr. (fig.1) forms a non-zero angle with the long axis of the intubation tube placement device (12).

As to claims 27 and 28, Flam as modified by Slanetz, Jr. teaches said at least one tactile accentuator flap (#25 of Slanetz, Jr.) proximate to and coupled to an antiperforation device (#12 of Slanetz, Jr.)

As to claim 29, Flam discloses an intubation tube (24) secured to said intubation tube placement device (12).

As to claims 30 and 31, Flam (fig.2) discloses said intubation tube placement device (12) internal to said intubation tube (24); and a retaining device (23, rubber stopper) inserted into said intubation tube, the rubber stopper having a hole (figs.3 and 8), the intubation tube placement device (12) internal to the rubber stopper hole.

As to claim 32, Flam (figs.3 and 8) discloses an intubation placement guide (24A) integral with said intubation tube (24); said intubation placement guide having a hole, said intubation tube placement device (12) internal to the intubation placement guide hole.

As to claim 33, Flam as modified by Slanetz, Jr. as discussed above with respect to claim 1 discloses an intubation tube placement device (12,13) comprising an antiperforation device having an exploratory portion shaped to prevent the anti-perforation device from perforating an internal body structure during insertion (#25 and col.2, lines

43-47 and lines 62-65 of Slanetz, Jr.); and an intubation tube (24) secured to said intubation tube placement device.

As to claim 34, Flam (fig.2) illustrates the intubation tube placement device to comprise a semi-rigid structure (col.6, line 24) having a smaller cross section than the cross section of the intubation tube (24).

As to claims 35-37, the semi-rigid structure of Flam is shaped as a cylindrical shaped rod and is fully appropriate (i.e. shape and size are easily compatible with a variety of patients of differing sizes and ages) for use in a human adult, human child or infant as well as in a non-human adult, non-human child animal or neonate infant animal.

As to claim 39, the semi-rigid structure of Flam (col.6, line 24) is also disclosed as a malleable material.

As to claims 40 and 41, Flam (fig.2) discloses said intubation tube placement device (12) internal to the intubation tube (24); and a retaining device (23 rubber stopper) inserted into said intubation tube, the rubber stopper having a hole through which said intubation placement device (12) extends.

As to claim 42, Flam (figs.3 and 8) discloses an intubation placement device guide (24A) integral with said intubation tube (24); said intubation placement device guide having a hole, said intubation tube placement device internal to the intubation placement device guide hole.

As to claim 44, Flam discloses an anti-perforation device (22 bronchoscope) having a light source (col.7, lines 48-50).

As to claims 45 and 46, Flam (col.7, lines 50-59) discloses said intubation tube placement device forms a hollow tube (i.e. note insufflation and suction lumen that extends entire length of device); said anti-perforation device having a trailing portion (e.g. adjacent handle #13) and an exploratory portion (e.g. adjacent tip of device #21) and a channel (col.7, lines 50-59) between the trailing portion and the exploratory portion of said anti-perforation device; and the trailing portion coupled to said intubation tube placement device such that the channel aligns with the hollow tube.

As to claim 51, Flam as discussed above with respect to claims 45 and 46 also teaches the exploratory portion of the anti-perforation device being formed from a malleable material (col.6, line 24).

As to claim 53, Flam as modified by Slanetz, Jr. as discussed above with respect to claim 14, teaches at least one tactile accentuator (#25 of Slanetz, Jr.) coupled to said intubation tube placement device.

As to claim 54, the outer surface of the tactile accentuator flap (25) of Slanetz, Jr. (fig.1) forms a non-zero angle with the long axis of the intubation tube placement device (12).

As to claim 59, Flam discloses a tapered tip on the intubation tube (24) as illustrated in figs.5 and 6.

As to claim 61, Flam as modified by Slanetz, Jr. as discussed above with respect to claim 1 also discloses an intubation placement device comprising an anti-perforation device having an exploratory portion shaped to prevent the anti-perforation device from perforating an internal body structure during insertion (#25 and col.2, lines 43-47 and

lines 62-65 of Slanetz, Jr.); and a handle (13) affixed to the intubation tube placement device.

As to claim 62, Flam discloses an intubation tube (24) secured to said intubation tube placement device.

As to claims 63 and 64, Flam (fig.2) discloses said intubation tube placement device (12) internal to the intubation tube (24); and a retaining device (23 rubber stopper) inserted into said intubation tube, the rubber stopper having a hole through which said intubation placement device (12) extends.

As to claim 65, Flam (figs.3 and 8) discloses an intubation placement device guide (24A) integral with said intubation tube (24); said intubation placement device guide having a hole, said intubation tube placement device internal to the intubation placement device guide hole.

As to claim 73, Flam (figs.5 and 6) as modified by Slanetz, Jr. as discussed above with respect to claim 1 also illustrates a method of intubation comprising inserting an intubation tube placement device (12,21) having an exploratory portion shaped to prevent the anti-perforation device from perforating an internal body structure during insertion (#25 and col.2, lines 43-47 and lines 62-65 of Slanetz, Jr.), secured to an intubation tube (24), into a patient's oral cavity; forcing the intubation tube placement device through the patient's vocal cords (e.g. fig.5); and axially sliding the intubation tube along the intubation tube placement device such that the intubation tube follows the intubation tube placement device through the patient's vocal cords (fig.6).

As to claim 74, the intubation tube placement device of Flam includes a light source (col.7, lines 48-50).

As to claims 75 and 76, Flam discloses suctioning materials from a vicinity of the patient's vocal cords via a suction tube formed by the intubation tube placement device (col.7, lines 51-59).

As to claim 77, Flam (col.7, lines 50-59) discloses said intubation tube placement device forms a hollow tube (i.e. note insufflation and suction lumen that extends entire length of device); said anti-perforation device having a trailing portion (e.g. adjacent handle #13) and an exploratory portion (e.g. adjacent tip of device #21) and a channel (col.7, lines 50-59) between the trailing portion and the exploratory portion of said anti-perforation device; and the trailing portion coupled to said intubation tube placement device such that the channel aligns with the hollow tube.

As to claim 78, Flam (figs.5 and 6) discloses manual manipulation of the intubation tube placement device (col.8, lines 16-21,44-50) into a patient's trachea. The application of axial pressure during manual manipulation of the intubation tube placement device of Flam is required in order to advance the device from a patient's mouth and into the trachea.

3. Claims 4,8-11,13,22,24-26,38,47-50,52,55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flam ('386) in view of Slanetz, Jr. ('091) as applied to claims 1-3,5-7,12,14-21,23,27-37,39-42,44-46,51,53,54,59,61-65,73-78 above, and further in view of Barthel et al. ('698).

The difference between Flam as modified by Slanetz, Jr. and claim 4 is the semirigid structure being formed from a medical grade polymeric material.

Barthel et al., in an intubation apparatus, teach a semi-rigid structure (30,31) being formed from a medical grade polymeric material (col.4, lines 36-38 and line 59) for the purpose of avoiding scraping of accumulated biological material from the wall of the endotracheal tube and alleviates the problem of scraped up material collecting on the distal end of the viewing assembly and obscuring the endoscopic view (col.3, lines 13-17).

It would have been obvious to further modify the constituency of the device of Flam to make the semi-rigid structure of Flam from medical grade polymeric material because it would have avoided scraping of accumulated biological material from the wall of the endotracheal tube and alleviated the problem of scraped up material collecting on the distal end of the viewing assembly and obscuring the endoscopic view as taught by Barthel et al..

As to claims 8 and 9, Barthel et el. teach the exploratory portion of the anti perforation device having a spheroid shape (32) which extends beyond the diameter of the intubation placement device (col.4, lines 54-55).

As to claim 10, Barthel et al. as discussed above with respect to claims 8 and 9, teach an exploratory portion having spheroid shape (32), the spheroid shape also being readable upon an angled shape.

As to claim 11, Barthel et al. as discussed above with respect to claims 8 and 9, teach an exploratory portion having spheroid shape (32), the spheroid shape also being

readable upon a blunted shape that extends beyond the diameter of the intubation placement device.

As to claim 13, at least a portion of the outer surface of the spheroid shape (32) of the exploratory portion of the anti-perforation device of Barthel et al. forms an oblique angle with respect to the long axis of the intubation tube placement device.

As to claim 22, Flam as further modified by Barthel et al. teach the semi-rigid structure being made of medical grade polymeric material (#30,31; col.3, lines 13-17 and col.4, lines 36-38 and line 59 of Barthel et al.).

As to claim 24, Flam as further modified by Barthel et al. as discussed above with respect to claim 22 teaches a semi-rigid structure having at least one tactile accentuator flap (#25 of Slanetz, Jr.) forming a non-zero angle with the long axis of the intubation tube placement device and being formed from a medical grade polymeric material.

As to claim 25, while Flam as further modified by Barthel et al. teach the semi-rigid structure to have a cylindrical facial profile, it would have been obvious to modify the shape of the facial profile of Flam to be of any desired shape including one having a 1mm by 1mm facial profile as an obvious matter of design choice with no new or unobvious results accruing. Inasmuch as applicant has not provided any criticality for the 1mm by 1mm facial profile, it is submitted that the cylindrical shape of the semi-rigid structure of Flam would have performed as well as one having a 1mm by 1mm facial profile.

As to claim 26, Flam discloses said semi-rigid structure being affixed to a ring-like structure (23) encompassing said intubation tube placement device (12).

As to claim 38, Flam as modified by Barthel et al. as discussed above with respect to claim 4 teach the semi-rigid structure being formed from a medical grade polymeric material.

As to claims 47 and 48, Barthel et al. teach the exploratory portion of the anti perforation device having a spheroid shape (32) which extends beyond the diameter of the intubation placement device (col.4, lines 54-55).

As to claim 49, Barthel et al. as discussed above with respect to claims 47 and 48, teach an exploratory portion having spheroid shape (32), the spheroid shape also being readable upon an angled shape.

As to claim 50, Barthel et al. as discussed above with respect to claims 8 and 9, teach an exploratory portion having spheroid shape (32), the spheroid shape also being readable upon a blunted shape that extends beyond the diameter of the intubation placement device.

As to claim 52, at least a portion of the outer surface of the spheroid shape (32) of the exploratory portion of the anti-perforation device of Barthel et al. forms an oblique angle with respect to the long axis of the intubation tube placement device.

As to claim 55, Flam as further modified by Barthel et al. as discussed above with respect to claim 22 teaches a semi-rigid structure having at least one tactile accentuator flap (#25 of Slanetz, Jr.) forming a non-zero angle with the long axis of the intubation tube placement device and being formed from a medical grade polymeric material.

As to claim 56, while Flam as further modified by Barthel et al. teach the semi-rigid structure to have a cylindrical facial profile, it would have been obvious to modify the

shape of the facial profile of Flam to be of any desired shape including one having a 1mm by 1mm facial profile as an obvious matter of design choice with no new or unobvious results accruing. Inasmuch as applicant has not provided any criticality for the 1mm by 1mm facial profile, it is submitted that the cylindrical shape of the semi-rigid structure of Flam would have performed as well as one having a 1mm by 1mm facial profile.

As to claim 57, Flam discloses said semi-rigid structure being affixed to a ring-like structure (23) encompassing said intubation tube placement device (12).

4. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flam ('386) in view of Slanetz, Jr. ('091) as applied to claims 1-3,5-7,12,14-21,23,27-37,39-42,44-46,51,53,54,59,61-65,73-78 above, and further in view of Davis ('478).

The difference between Flam as modified by Slanetz, Jr. and claim 58 is the apparatus being enclosed in sterile packaging.

Davis (col.9, lines 13-17 and lines 25-28) teaches enclosing an intubation device within sterile packaging prior to use in order to prevent contamination of a patient.

It would have been obvious to further modify the device of Flam to enclose the device of Flam within sterile packaging prior to use because it would have prevented patient contamination as taught by Davis.

5. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flam ('386) in view of Slanetz, Jr. ('091) as applied to claims 1-3,5-7,12,14-21,23,27-37,39-42,44-46,51,53,54,59,61-65,73-78 above, and further in view of Adair ('940).

The difference between Flam as modified by Slanetz, Jr. and claim 60 is a vented tip on the intubation tube.

Adair, in an intubation apparatus, teaches an intubation tube having a vented tip (i.e. Murphy eye) for the purpose of providing an alternate pathway for the flow of breathable gases in case the distal tip becomes blocked with mucous and/or debris.

It would have been obvious to further modify the tip of the intubation tube of Flam to include a vent (i.e. Murphy eye) because it would have provided an alternate pathway for the flow of breathable gases in case the distal tip becomes blocked with mucous and/or debris as taught by Adair.

## Allowable Subject Matter

- 6. Claims 66-71 are allowed.
- 7. Claim 79 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Response to Arguments

8. Applicant's arguments with respect to claims 1-42,44-65,73-79 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (571) 272-4795. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY A. BENNETT can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3743

AARON J. LEWIS Primary Examiner Art Unit 3743 Page 16

Aaron J. Lewis December 24, 2005